MODEL G9969
RADIAL DRILL PRESS
OWNER'S MANUAL

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#JK8210 PRINTED IN CHINA

⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Foreword

We are proud to offer the Model G9969 Radial Drill Press. This machine is part of a growing Grizzly family of fine woodworking and metalworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

We are pleased to provide this manual with the Model G9969. It was written to guide you through assembly, review safety considerations, and cover general operating procedures. It represents our effort to produce the best documentation possible.

The specifications, drawings, and photographs illustrated in this manual represent the Model G9969 as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. For your convenience, we always keep current Grizzly manuals available on our website at **www.grizzly.com**. Any updates to your machine will be reflected in these manuals as soon as they are complete. Visit our site often to check for the latest updates to this manual!

Contact Info

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
C/O Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069

We stand behind our machines. If you have any service questions or parts requests, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com
Web Site: http://www.grizzly.com

Identification

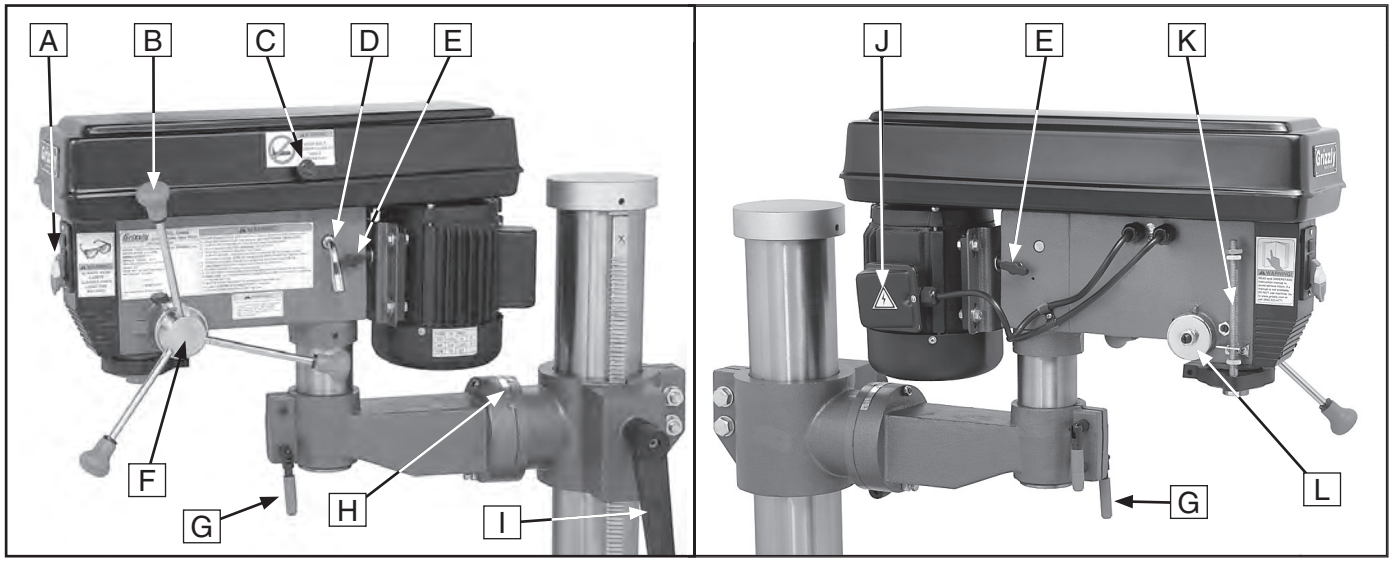


Figure 1. G9969 Identification.

A. Main Power and Light Switches
B. Downfeed Handles
C. Belt Cover Knob
D. Belt Tension Lever
E. Belt Tension Lock Knob
F. Pinion Hub
G. Headstock Lock Handles
H. Headstock Tilt Scale
I. Crank Handle
J. Junction Box
K. Depth Stop
L. Feed Shaft Return Spring

MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

MODEL G9969 RADIAL DRILL PRESS

Product Dimensions:

Weight..... 375 lbs.
Length/Width/Height..... 39-1/2 x 22 x 51 in.
Foot Print (Length/Width)..... 39-1/2 x 18-1/2 in.

Shipping Dimensions:

Type..... Wood Crate
Content..... Machine
Weight..... 525 lbs.
Length/Width/Height..... 32 x 42 x 19 in.

Electrical:

Switch..... Paddle On/Off with Safety Lockout Key
Switch Voltage..... 110/220V
Cord Length..... 7 ft.
Cord Gauge..... 16 gauge
Recommended Breaker Size..... 20 amp
Plug..... Yes

Motors:

Main

Type..... TEFC Capacitor Start Induction
Horsepower..... 1 HP
Voltage..... 110/220V
Prewired..... 110V
Phase..... Single
Amps..... 10/5A
Speed..... 1725 RPM
Cycle..... 60 Hz
Number Of Speeds..... 1
Power Transfer ..... Belt Drive
Bearings..... Sealed and Lubricated

Main Specifications:

Construction

Table Construction..... Cast Iron
Spindle Housing Construction..... Cast Iron
Column Construction..... Ground Cast Iron
Head Construction..... Cast Iron
Base Construction..... Cast Iron
Paint..... Epoxy

Head Information

Head Tilt..... Left and Right 45 deg.
Head Swivel..... 360 deg.

The information contained herein is deemed accurate as of 5/12/2006 and represents our most recent product specifications. Due to our ongoing improvement efforts, this information may not accurately describe items previously purchased.

Other Related Information

Base Length	39-1/2 in.
Base Width	17-1/2 in.
Quill Diameter	2.950 in.
Depth Stop Type	Hub
Column Diameter	5 in.

Spindle Information

Spindle Taper	MT#3
Spindle Travel	3-1/4 in.
Dist From Spindle To Column	24 in.
Dist From Spindle To Table	15-1/2 - 36 in.
Dist From Spindle To Base	36 in.

Table Information

Table Length	21 in.
Table Width	16-1/4 in.
Table Thickness	4-1/2 in.
No. Of T Slots	2
T Slot Width	5/8 in.
T Slot Length	21 in.

Operation Information

Swing	45 in.
Drilling Capacity	1-1/4 in. in Steel
No Of Spindle Speeds	12
Range Of Spindle Speeds	200-3000 RPM
Drill Chuck Type	JT3 Key Chuck
Drill Chuck Size	5/8 in.

Other Specifications:

Country Of Origin	China
Warranty	1 Year
Serial Number Location	Data Label on Head
Assembly Time	30 minutes

Features:

Slots in Table Allows the Use of a Variety of Clamping Devices
Spindle Can be Brought Close to the Column with the Uniquely Designed Swivel Post
1/8" - 5/8" Chuck
1HP Motor
12 Speeds
45" Swing
MT#3 Spindle Taper

The information contained herein is deemed accurate as of 5/12/2006 and represents our most recent product specifications.
Due to our ongoing improvement efforts, this information may not accurately describe items previously purchased.

SECTION 1: SAFETY

⚠WARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.

⚠DANGER **Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.**

⚠WARNING **Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

⚠CAUTION **Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.**

NOTICE **This symbol is used to alert the user to useful information about proper operation of the machine.**

⚠WARNING

Safety Instructions for Machinery

1. **READ THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses—they are NOT safety glasses.
3. **ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust can cause severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing loss.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry that can catch in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
6. **NEVER OPERATE MACHINERY WHEN TIRED OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.

⚠WARNING
Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.

8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.

9. **MAKE WORKSHOP CHILDPROOF.** Use padlocks, master switches, and remove start switch keys.

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power ***OFF*** and allow all moving parts to come to a complete stop before leaving machine unattended.

11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.

12. **KEEP WORK AREA CLEAN AND WELL LIGHTED.** Clutter and dark shadows may cause accidents.

13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Grounded cords minimize shock hazards. Undersized cords create excessive heat. Always replace damaged extension cords.

14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY**. Make sure switch is in OFF position before reconnecting.

15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**

17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery ***ON***.

18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding or misaligned parts, broken parts, loose bolts, and any other conditions that may impair machine operation. Repair or replace damaged parts before operation.

19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. Improper accessories increase risk of injury.

20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.

21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.

22. **DO NOT OVERREACH.** Maintain stability and balance at all times.

23. **MANY MACHINES CAN EJECT WORKPIECES TOWARD OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."

24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY**.

25. **CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Be aware of the type of dust you are exposed to and always wear a respirator designed to filter that type of dust.

⚠WARNING
Safety for Drill Presses

1. **EYE/FACE/HAND PROTECTION.** A face shield or safety glasses is recommended. Always keep hands and fingers away from the drill bit. Never hold a workpiece by hand while drilling! DO NOT wear gloves when operating the drill.

2. **SECURING BIT.** Properly tighten and securely lock the drill bit in the chuck.

3. **CORRECT BIT.** Use only round, hex, or triangular shank drill bits.

4. **ADJUSTING KEYS AND WRENCHES.** Remove all adjusting keys and wrenches before turning the machine ***ON***.

5. **DRILLING SHEET METAL.** Never drill sheet metal unless it is securely clamped to the table.

6. **SURFACE/WORKPIECE PREP**. Never turn the drill press ***ON*** before clearing the table of all objects (tools, scrap wood, etc.) DO NOT drill material that does not have a flat surface, unless a suitable support is used.

7. **DAMAGED TOOLS.** Never use drill bits in poor condition. Dull or damaged drill bits are hard to control and may cause serious injury.

8. **DRILL OPERATION**. Never start the drill press with the drill bit pressed against the workpiece. Feed the drill bit evenly into the workpiece. Back the bit out frequently to clear chips in deep holes.

9. **CLEARING CHIPS.** Turn the machine ***OFF*** and clear chips and scrap pieces with a brush. Disconnect power, remove drill bit, and clean table before leaving the machine.

10. **OPERATING SPEED.** Always operate your drill press at speeds that are appropriate for the drill bit size and the material that you are drilling.

11. **MOUNTING WORKPIECES.** Use clamps or vises to secure workpiece before drilling. Position work so you avoid drilling into the table.

12. **TABLE LOCK**. Make sure the table lock is tightened before starting the drill press.

13. **MAINTENANCE/SPEED CHANGES.** Never change speeds or do maintenance with the machine connected to power.

14. **EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.

⚠WARNING

Like all machines there is danger associated with this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

⚠CAUTION

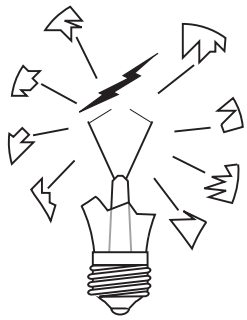
No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.

SECTION 2: CIRCUIT REQUIREMENTS

110/220V Operation

⚠WARNING

Serious personal injury could occur if you connect the machine to the power source before you have completed the set up process. DO NOT connect the machine to the power source until instructed to do so.



⚠WARNING

ALWAYS remove light bulb if converting to 220V. If the light socket is used while operating at 220V, the light bulb WILL EXPLODE, potentially causing serious personal injury.

Amperage Draw

The Model G9969 features 110/220V motor that is prewired for 110V and draws the following amps under maximum load:

Motor Draw at 110V ..... 10 Amps
Motor Draw at 220V ..... 5 Amps

Circuit Requirements

We recommend using a dedicated circuit for this machine. You MUST connect your machine to a grounded circuit that is rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**

110V Circuit ..... 15 Amps
220V Circuit ..... 15 Amps

Plug Type

The Model G9969 comes prewired with a NEMA 5-15 plug. If you wish to rewire the motor to 220V we recommend using the following plug (see **Figure 2** for an example):

220V Plug & Outlet ..... NEMA 6-15

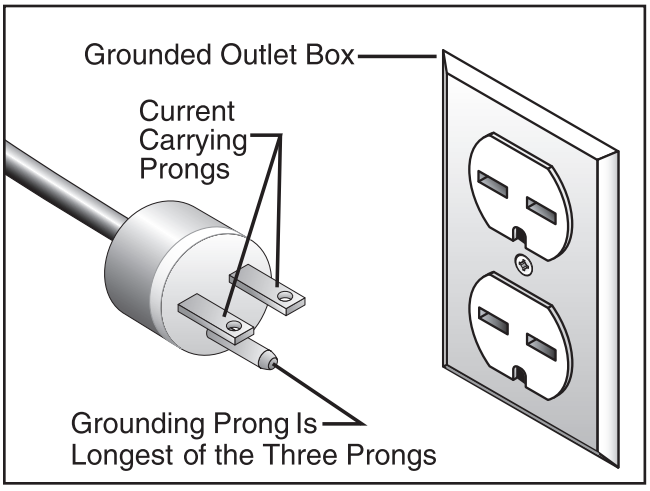
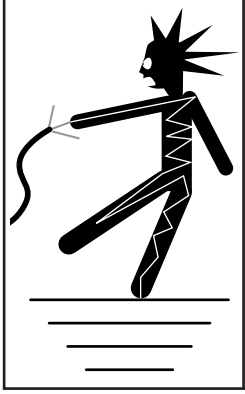


Figure 2. NEMA 6-15 plug and outlet.

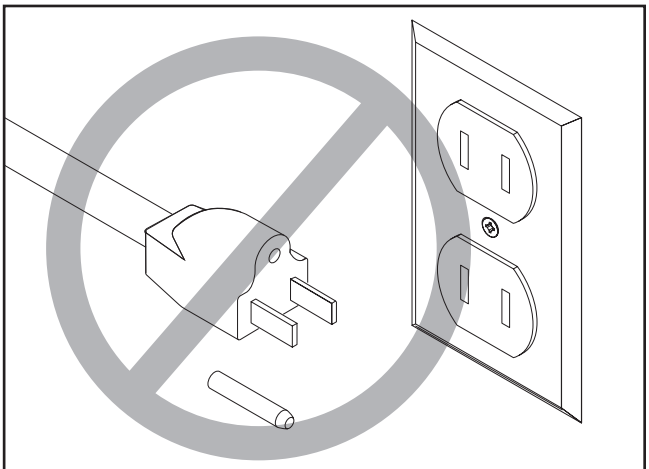
Grounding

In the event of an electrical short, grounding reduces the risk of electric shock. The grounding wire in the power cord must be properly connected to the grounding prong on the plug; likewise, the outlet must be properly installed and grounded. All electrical connections must be made in accordance with local codes and ordinances.



⚠WARNING

Electrocution or fire could result if this machine is not grounded correctly or if your electrical configuration does not comply with local and state codes. Ensure compliance by checking with a qualified electrician!



⚠CAUTION

This machine must have a ground prong in the plug to help ensure that it is grounded. DO NOT remove ground prong from plug to fit into a two-pronged outlet! If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician.

Extension Cords

110V Operation

We do not recommend the use of extension cords. Instead, arrange the placement of your equipment and the installed wiring to eliminate the need for extension cords.

If you find it absolutely necessary to use an extension cord at 110V with your machine:

- Use at least a 16 gauge cord that does not exceed 50 feet in length!
- The extension cord must also contain a ground wire and plug pin.
- A qualified electrician MUST size cords over 50 feet long to prevent motor damage.

220V Operation

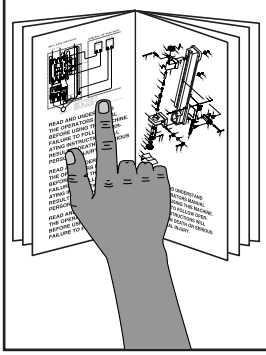
We do not recommend the use of extension cords. Instead, arrange the placement of your equipment and the installed wiring to eliminate the need for extension cords.

If you find it absolutely necessary to use an extension cord at 220V with your machine:

- Use at least a 16 gauge cord that does not exceed 50 feet in length!
- The extension cord must also contain a ground wire and plug pin.
- A qualified electrician MUST size cords over 50 feet long to prevent motor damage.

SECTION 3: SET UP

Set Up Safety



⚠WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!

⚠WARNING

Wear safety glasses during the entire set up process!

⚠WARNING

The Model G9969 is a heavy machine. DO NOT over-exert yourself while unpacking or moving your machine—get assistance.

Items Needed for Set Up

The following items are needed to complete the set up process, but are not included with your machine:

Description	Qty
• Safety Glasses (for each person)	1
• Assistants for Lifting Help	As required
• 15mm Wrench	1
• Phillips Head Screwdriver #2	1
• Rubber Mallet	1

Unpacking

The Model G9969 was carefully packed when it left our warehouse. If you discover the machine is damaged after you have signed for delivery, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, you should inventory the contents.

Inventory

After all the parts have been removed from the crate, you should have the following items:

Box 1: (Figure 3)	Qty
A. Drill Press Headstock	1
B. Headstock Bracket	1
C. Column Cap (attached to column)	1
D. Column	1
E. Base	1

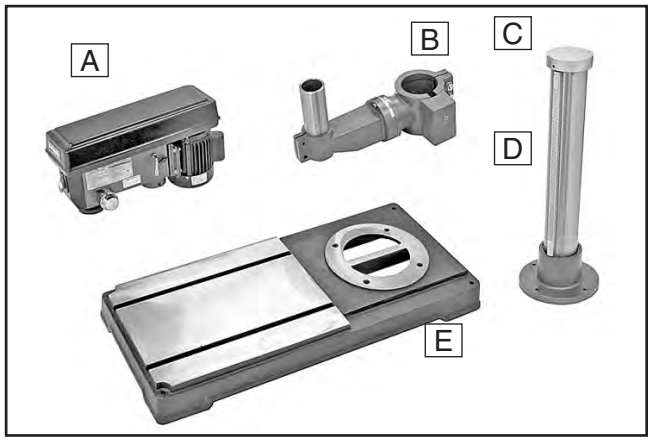


Figure 3. Major inventory components.

Other Components and Hardware	Qty
• Downfeed Handles	3
• Lock Handles ¼"-20	2
• Crank Handle Arm	1
• Crank Handle	1
• Arbor JT#3/MT#3	1
• Chuck JT#3	1
• Chuck Key	1
• Cover Knob ¼"-20	1
• Phillips Head Screw ¼"-20 x ½"	1
• Flat Washer ¼"	1
• Drift Key	1
• Hex Bolts ½"-13 x 2"	4
• Flat Washers ½"	4
• Hex Wrenches 3, 4, 5mm	1 ea

In the event that any nonproprietary parts are missing (e.g. a nut or a washer), we would be glad to replace them, or for the sake of expediency, replacements can be obtained at your local hardware store.

NOTICE

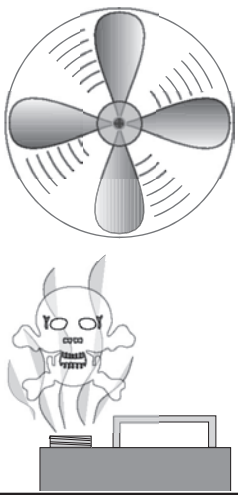
Some hardware/fasteners on the inventory list may arrive pre-installed on the machine. Check these locations before assuming that any inventory items are missing.

Clean Up

The unpainted surfaces are coated with a waxy oil to protect them from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser such as Grizzly's G7895 Degreaser. To clean thoroughly, some parts may need to be removed. **For optimum performance from your machine, make sure you clean all moving parts or sliding contact surfaces that are coated.** Avoid chlorine-based solvents, such as acetone or brake parts cleaner, as they may damage painted surfaces should they come in contact. Always follow the manufacturer's instructions when using any type of cleaning product.

⚠WARNING

Gasoline and petroleum products have low flash points and could cause an explosion or fire if used to clean machinery. DO NOT use gasoline or petroleum products to clean the machinery.

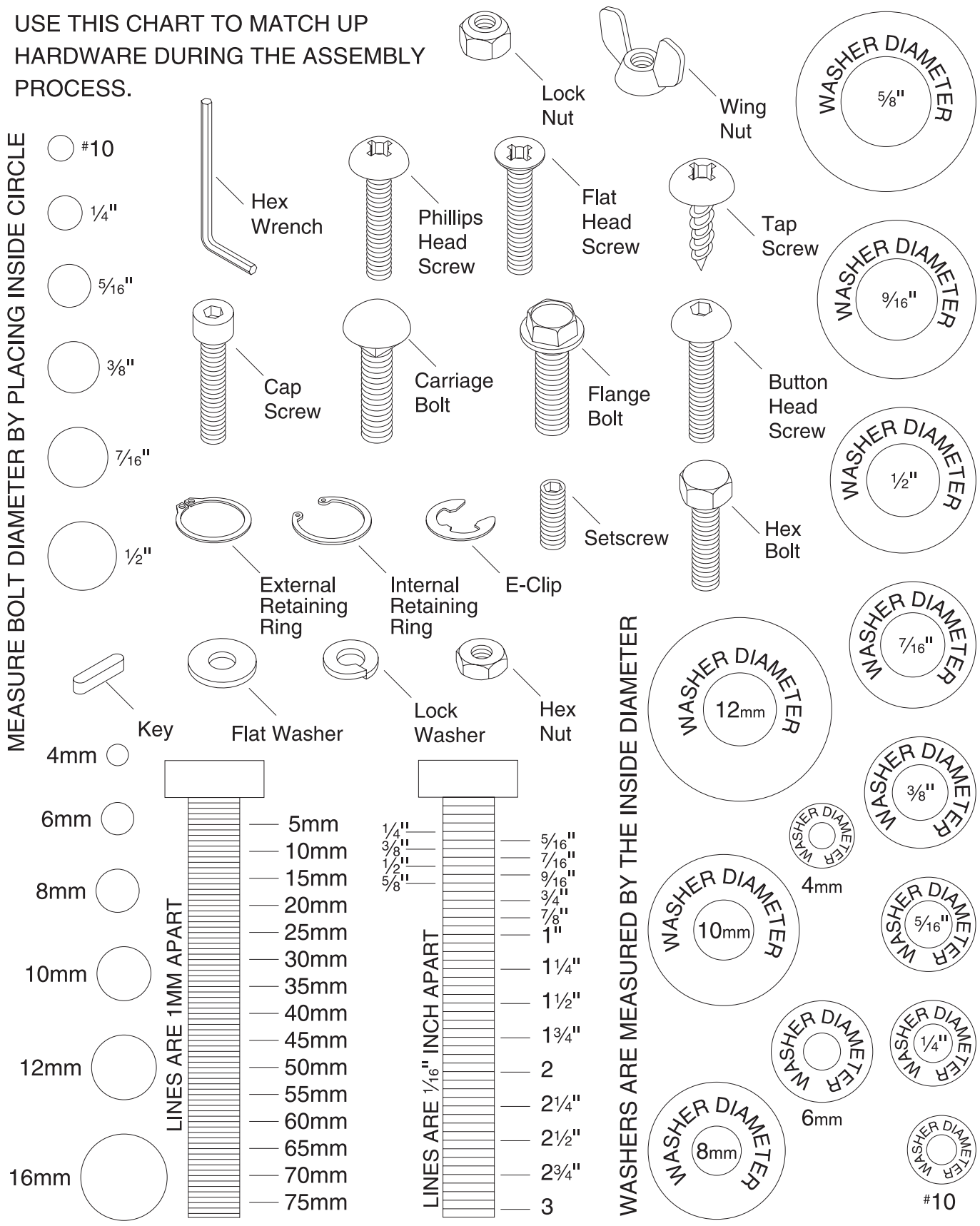


⚠CAUTION

Many of the solvents commonly used to clean machinery can be toxic when inhaled or ingested. Lack of ventilation while using these solvents could cause serious personal health risks or fire. Take precautions from this hazard by only using cleaning solvents in a well ventilated area.

Hardware Recognition Chart

USE THIS CHART TO MATCH UP HARDWARE DURING THE ASSEMBLY PROCESS.



Site Considerations

Floor Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some floors may require additional reinforcement to support the machine, workpiece, and operator.

Working Clearances

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 4** for the minimum working clearances.

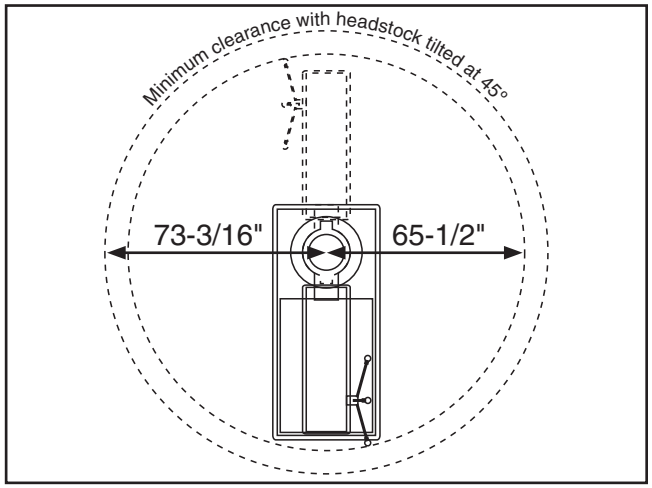
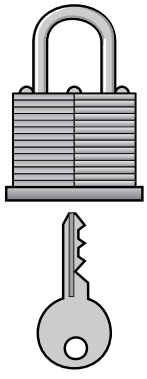


Figure 4. Minimum working clearances.



⚠CAUTION

Unsupervised children and visitors inside your shop could cause serious personal injury to themselves. Lock all entrances to the shop when you are away and DO NOT allow unsupervised children or visitors in your shop at any time!

Mounting

Because the assembled G9969 drill press is extremely heavy and difficult to move, we recommend mounting the base to the floor before the drill press is assembled. Take note of the drill press working clearances on this page when determining a location for your drill press.

Because floor materials may vary, floor mounting hardware is not included. Generally, you can either bolt your machine to the floor or mount it on machine mounts. Both options are described below, and the recommended hardware for each option is shown on **Page 15**. Whichever option you choose, it is necessary to level your machine with a precision level.

Bolting to Concrete Floors

Lag shield anchors with lag bolts and anchor studs are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

NOTICE

Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine.

Using Machine Mounts

Using machine mounts gives the advantage of fast leveling and vibration reduction. The large size of the foot pads distributes the weight of the machine to reduce strain on the floor.

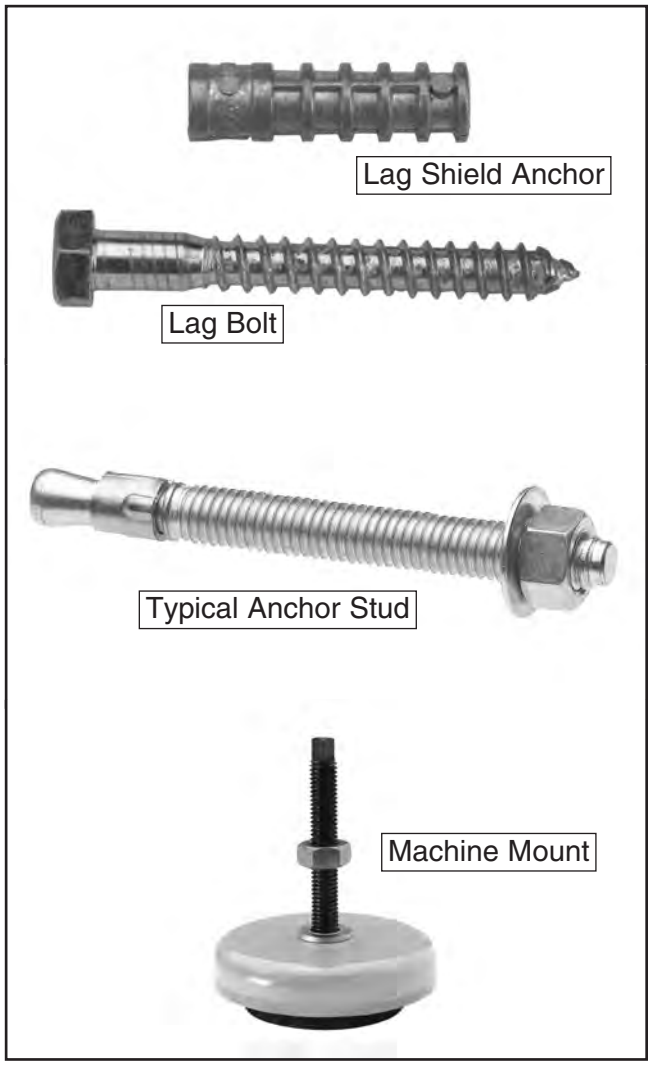


Figure 5. Different floor mounting methods.

Column

Components and Hardware Needed: **Qty**
Base 1
Column 1
Hex Bolts ½"-13 x 2" 4
Flat Washers ½" 4

To install the column on the base:

1. Place the column on the base, making sure to align the holes in both the column and the base.

2. Have an assistant hold the column steady-while you secure the column to the base with the hex bolts, as shown in **Figure 6**.

Figure 6. Assembled column and base.

Headstock Bracket

Components and Hardware Needed: **Qty**
Headstock Bracket 1
Column 1
Column Cap 1
Lock Handles 2
Crank Handle 1
Crank Handle Arm 1

To mount the headstock bracket on the column:

1. Mark the top of the rack, as shown in **Figure 7**, to reference which end is the top.

Figure 7. Marking the top of the rack.

2. Loosen the cap screw on the column cap and remove the cap and rack from the column.

3. Place the rack inside the headstock bracket, engage it with the gear inside the headstock bracket, and with help of assistants, slide the rack and headstock bracket onto the column, as shown in **Figure 8**.

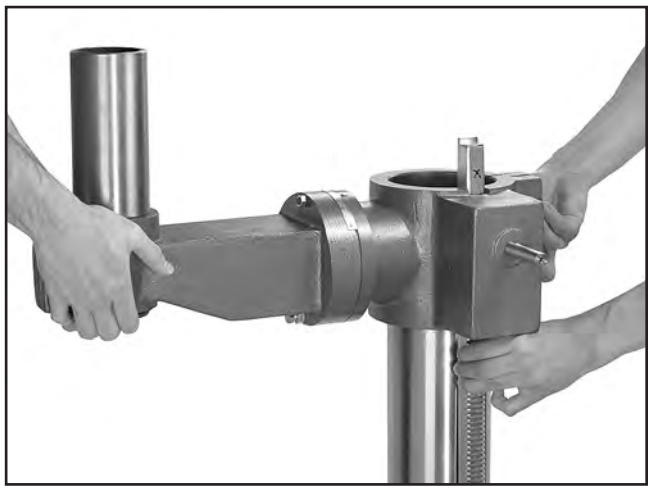


Figure 8. Mounting headstock bracket.

4. Re-install the cap and tighten the cap screw.

5. Install the lock handles as shown in **Figure 9**.

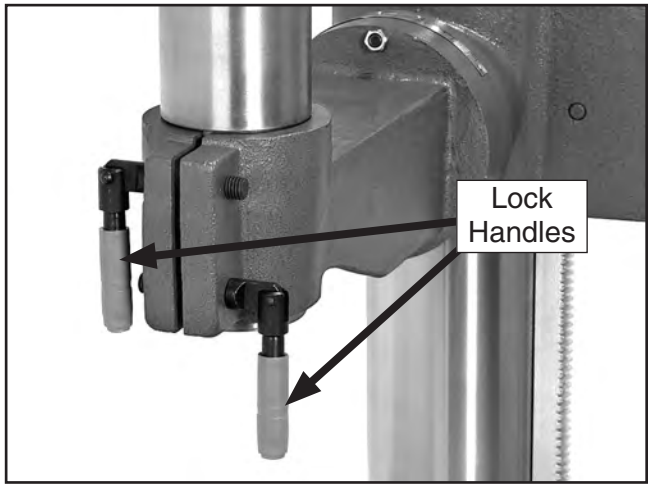


Figure 9. Headstock bracket lock handles.

6. Screw the crank handle into the crank handle arm.

7. Loosen the set screw located in the crank handle arm, and slide the crank handle arm onto the crank shaft. Tighten the set screw.

Headstock

Components and Hardware Needed: **Qty**
Base/Column/Bracket Assembly..... 1
Headstock 1

To install the headstock:

1. With the help of an assistant, lift the headstock and slide it onto the bracket column, as shown in **Figure 10**.

Figure 10. Mounting the headstock.

2. Align the headstock with the base and tighten the two set screws shown in **Figure 11**.

Figure 11. Headstock set screws.

Downfeed Handles & Belt Cover Knob

Components and Hardware Needed: **Qty**
Downfeed Handles 3
Cover Knob ¼"-20 1
Phillips Head Screw ¼"-20 x ½" 1
Flat Washer ¼" 1

The downfeed handles must be installed to operate the drill press.

To install the downfeed handles:

1. Thread the downfeed handles into the pinion hub, as shown in **Figure 12**.

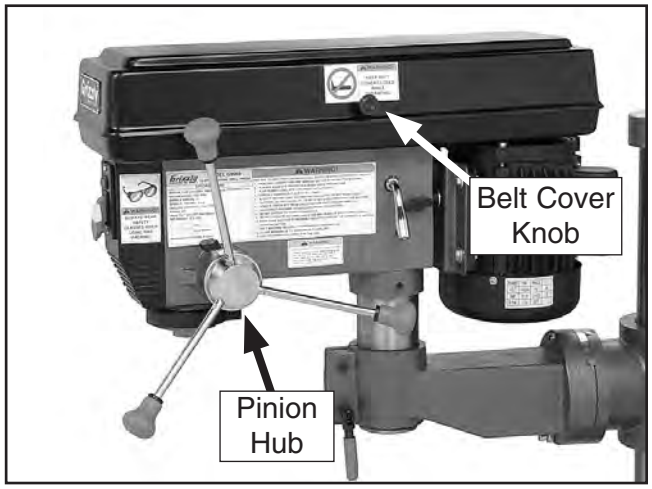


Figure 12. Downfeed handles installed.

2. Remove the screw that fastens the belt cover in place and install the belt cover knob in its place.

Light (110V Only)

Components and Hardware Needed: **Qty**
60W Light Bulb (not included) 1

The Model G9969 includes a light socket, intended for **110V usage only**. When the drill press is shipped from the factory, a dust plug is installed in the light socket for protection.

To install a light bulb in the drill press:

1. Remove the dust plug from the light socket.

2. Install a 60W or smaller light bulb in the location shown in **Figure 13**.

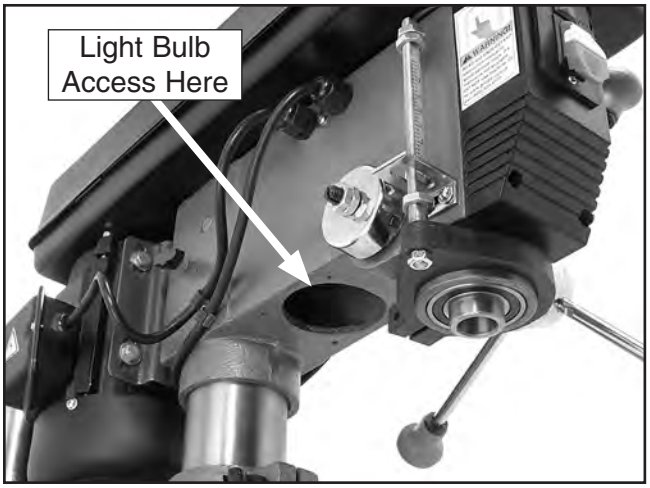
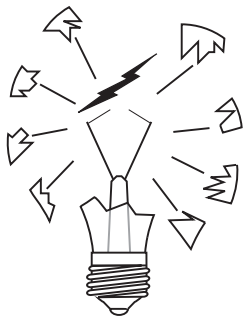


Figure 13. Light bulb access location.



⚠WARNING

The light socket included with this drill press is for 110V USE ONLY. If the light socket is used while operating at 220V, the light bulb WILL EXPLODE, potentially causing serious personal injury.

Drill Chuck & Arbor

The drill chuck attaches to the spindle by means of the arbor, shown in **Figure 14**. Matched tapers on the arbor and the inside of the chuck create a semi-permanent assembly when properly joined.

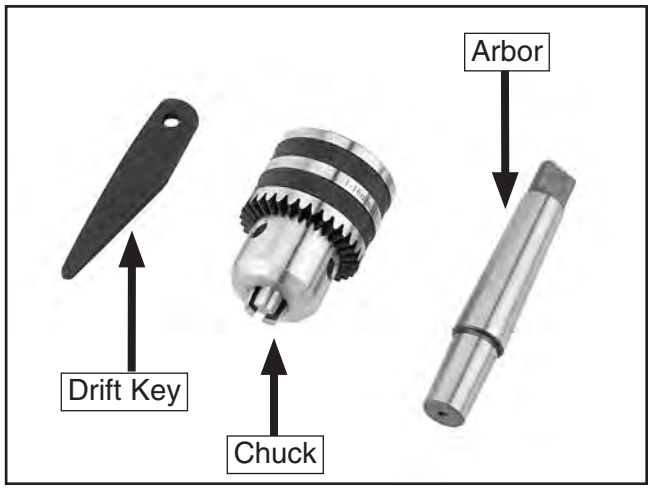


Figure 14. Chuck components.

Components and Hardware Needed: **Qty**
Chuck .....
Arbor.....1

To assemble the drill chuck and mount it to the spindle:

1. Use mineral spirits to thoroughly clean the drill chuck and arbor, and dry all surfaces before assembly. Follow all safety warnings on the container of mineral spirits. **Failure to clean the mating surfaces may cause the tapered fit to loosen during operation, resulting in separation, which could lead to serious injury**.

2. Hand-turn the chuck to adjust the chuck jaws until they are inside the drill chuck body.

3. Place the drill chuck face down on a workbench. The arbor has a short taper and a long taper. Place the short taper into the socket in the back of the drill chuck and tap it with a rubber or wooden mallet, as shown in **Figure 15**. If the chuck fails to remain secure on the arbor, repeat **Steps 1 & 2**.

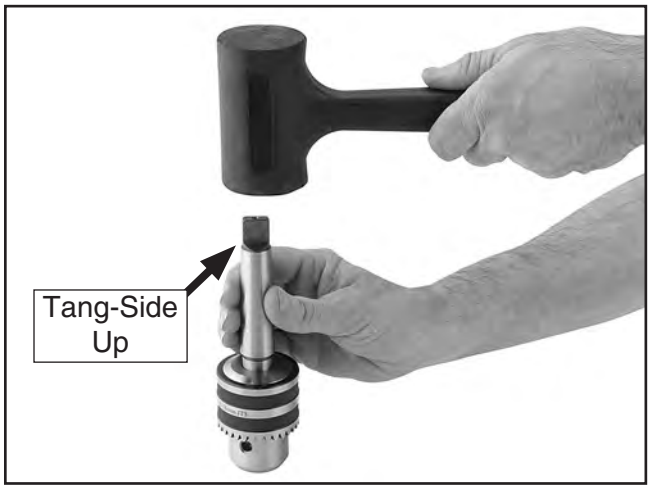


Figure 15. Seating arbor into chuck.

4. Slide the arbor into the spindle while slowly rotating the drill chuck. The flattened end of the arbor (the tang, shown in **Figure 15**) will engage with a rectangular slot inside the spindle.

5. Once the arbor has seated into the spindle completely, tap the chuck with a rubber mallet, as shown in **Figure 16.**

⚠CAUTION

DO NOT use a steel hammer on the drill chuck to seat the arbor into the spindle. You will damage the chuck or spindle, which may make them unusable or unsafe.

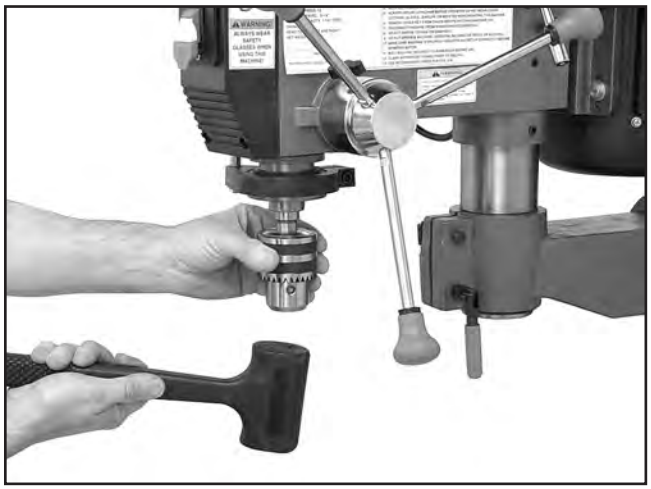
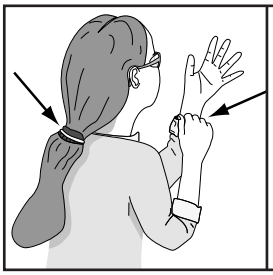


Figure 16. Seating arbor and chuck into spindle.

Test Run

⚠WARNING

Wear safety glasses whenever starting or using machine. Failure to comply may result in serious personal injury.



⚠WARNING

Keep loose clothing rolled up and out of the way of machinery and keep hair pulled back.

Once the assembly is complete, test run your machine to make sure it runs properly, and to test prominent safety features installed on the machine.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review the **Troubleshooting** on **Page 29**.

If you still cannot remedy a problem, contact our Tech Support at (570) 546-9663 for assistance.

To test run your machine:

1. Ensure that anyone in the vicinity of the drill press, including yourself, is wearing safety glasses.

2. Make sure you have read the safety instructions at the beginning of the manual and that the machine is set up properly.

3. Make sure all tools and objects used during setup are cleared away from the machine.

4. Connect the machine to the power source.

5. Remove the safety switch key (**on Page 20**) from the main switch.

6. Move the switch to the ***ON*** position. The drill press should NOT switch on.

7. Move the switch to the ***OFF*** position and insert the safety switch key into the switch.

8. Turn the drill press ***ON***.

9. Listen to and watch for abnormal noises or actions. The machine should run smoothly with little or no vibration or rubbing noises.

10. Turn the drill press ***OFF***.

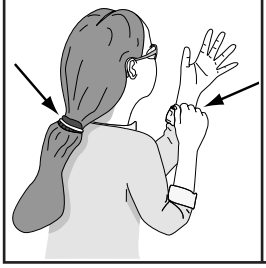
11. Strange or unusual noises should be investigated and corrected before operating the machine further. ALWAYS disconnect the machine from power when investigating or correcting potential problems.

SECTION 4: OPERATIONS

Operation Safety

⚠WARNING

Wear safety glasses when operating this machine. Serious injury may occur if this warning is ignored!



⚠WARNING

Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing and long hair away from moving machinery.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Safety Switch Key

To prevent the machine from starting, remove the safety switch key (**Figure 17**) from the paddle switch.

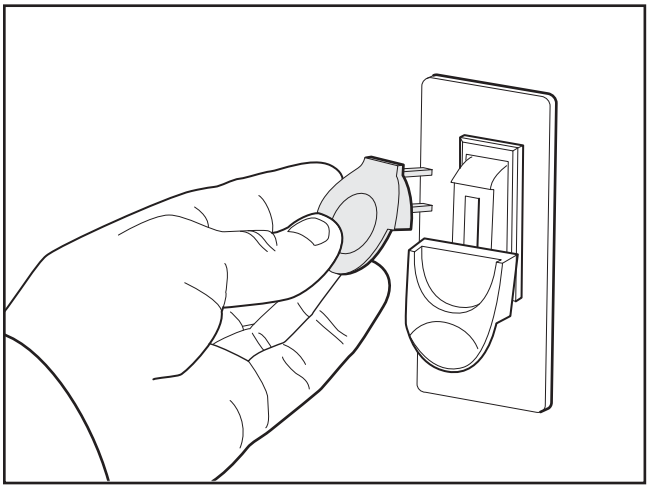


Figure 17. Removing key to disable switch.

Changing Bits

The Model G9969 is equipped with a key chuck, which can be opened and securely closed by using the included chuck key. Any drill bit you install in the chuck must be installed tightly enough that it will not come loose during operation.

To install a drill bit:

1. UNPLUG THE DRILL PRESS!

2. Open the drill chuck wide enough to accept the shank of the drill bit.

3. Insert the drill bit as far as possible into the chuck WITHOUT allowing the chuck jaws to touch the fluted portion of the bit, and hand tighten the chuck.

4. Once you are sure the bit is installed correctly, tighten the chuck as tight as possible with the chuck key.

5. Remove the chuck key from the chuck.

To remove a drill bit:

1. UNPLUG THE DRILL PRESS!

2. While wearing heavy leather gloves, hold the drill bit in one hand, and by using the chuck key, loosen the chuck with the other hand.

3. Once the drill chuck is loose enough, remove the drill bit from the chuck.

4. Remove the chuck key from the chuck.

Arbor Removal

The arbor can be removed to install other Morse taper tooling in the spindle. A drift key is included to help remove the arbor or other tooling from the spindle. Usually, once the chuck and arbor have been properly mounted together, they are considered semi-permanent connections. (If you would like to install a different chuck, we recommend obtaining a new arbor for that chuck.)

To remove the drill chuck and arbor:

1. UNPLUG THE DRILL PRESS!

2. Rotate the downfeed handles until the drift key slot is exposed in the side of the quill.

3. Tighten the return height nut, shown on **Page 25**, up against the depth stop bracket. This will prevent the quill from retracting when you release the downfeed handles.

4. Rotate the spindle until the inner drift key slot is aligned with the outer slot, as shown in **Figure 18**. You will see through the spindle when the slot is properly aligned.

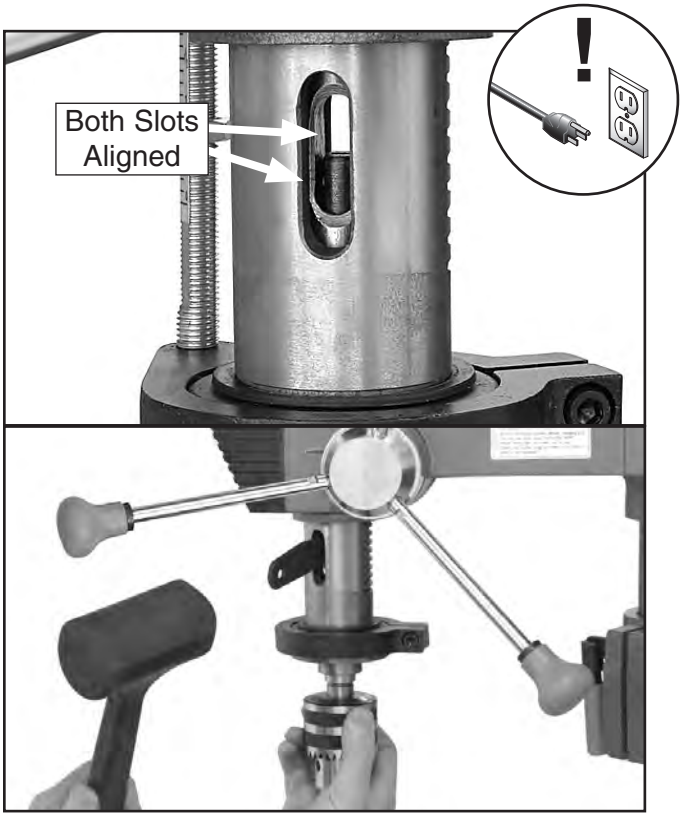


Figure 18. Using drift key to remove arbor.

5. Insert the drift key into the drift key slot, and allow the quill to rise and trap the drift key by backing off the downfeed handles slightly.

6. Hold the drill chuck with one hand and tap on the drift key with a rubber or wooden mallet (**Figure 18**) until the arbor releases.

7. While holding onto a downfeed handle, loosen the return height nut so that the quill can retract completely.

8. Carefully retract the quill into the headstock.

Basic Drilling Operations

The Model G9969 is designed for drilling holes in wood, plastics or metal. The basic operation of a drill press is lining up your drill bit with the intended hole location, turning the drill press ***ON***, and using the downfeed handles to move the spinning drill bit into the workpiece at a steady and controlled feed rate.

For safe operation and optimum results, it is very important to follow these guidelines when drilling:

SECURING WORKPIECE TO BASE: Secure the workpiece to the base or in a vise that is secured to the base before drilling.

CLEARING CHIPS: Raise the drill bit often to clear chips and cool the drill bit. This will ease the work of the drill press motor and extend the life of your drill bits.

PROTECTING BASE: Protect the base by placing the workpiece on scrap wood. Also, use the depth stop so that the drill bit goes no deeper than necessary.

USING CORRECT SPEEDS: Use the correct speed for the diameter of the drill bit being used and the type of material being drilled. Refer to the **Drill Bit Speed Chart** on **Page 23** to help you choose the correct speed for your application.

LARGE DIAMETER BITS: Large diameter drill bits require slower spindle speeds.

SMALL DIAMETER BITS: Smaller diameter drill bits require faster spindle speeds.

HARD MATERIAL: The harder the material, (steel vs. wood) the slower the spindle speed.

SOFT MATERIAL: The softer the material, the faster the spindle may turn. (Plastics can melt at too high of a spindle speed!)

LUBRICANT: Use some form of lubricant on all materials except wood and cast iron. Refer to **Lubrication Suggestions** on **Page 23** to find the correct lubrication for your application.

DRILLING ACCURACY: To prevent drill bit wandering and ensure accurate placement of holes, mark the hole location with a center punch before drilling. Also consider using a center-point drill to start the hole.

PLUG/ROSETTE CUTTERS: Plug cutters and rosette cutters are for wood only. However, carbide-tipped bits and cutters cut at a higher speed and can cut materials other than wood, depending on the cutter type.

5-FLUTE/2-FLUTE CUTTERS: Use a 5-flute cutter when cutting into plastics, brass, aluminum, and mild steel. A 2-flute cutter can aggressively grab the workpiece and damage the tool if used with materials other than wood.

SPADE BITS AND PLASTIC: When drilling plastic with a spade bit, use a spade bit with spurs.

HOLE SAWS: When using hole saws, apply firm and even pressure, so the saw teeth contact the surface all at the same time—not at an angle. You can also flip the workpiece and finish cutting from the other side.

⚠WARNING

Larger bits turning at slower speeds tend to grab the workpiece aggressively. When using large bits, always clamp the workpiece to the base to prevent injuries. Failure to heed this caution can result in the operator's hand being pulled into the bit or the workpiece being thrown with great force, causing serious personal injury!

Choosing Speeds

Using the Drill Bit Speed Chart

The chart shown in **Figure 19** is intended as a guide only. Always follow manufacturer's speed recommendations if provided with your drill bits, cutters, or hole saws. Exceeding the recommended speeds may be dangerous to the operator.

The speeds shown here are intended to get you started. The optimum speed will always depend on various factors, including tool diameter, drilling pressure, material hardness, material quality, and desired finish.

Often, when drilling materials other than wood, some type of lubrication is necessary.

Lubrication Suggestions

Wood .....None
Plastics ..... Soapy Water
Brass ..... Water-Based Lubricant
Aluminum.....Paraffin-Based Lubricant
Mild Steel.....Oil-Based Lubricant

⚠CAUTION

Larger bits turning at slower speeds tend to grab the workpiece aggressively. This can result in the operator's hand being pulled into the bit or the workpiece being thrown with great force. Always clamp the workpiece to the table to prevent injuries.

Twist/Brad Point Drill Bits	Soft Wood	Hard Wood	Plastic	Brass	Aluminum	Mild Steel
1/16" – 3/16"	3000	2500	2500	2500	3000	2500
13/64" – 3/8"	2000	1500	2000	1250	2500	1250
25/64" – 5/8"	1500	750	1500	750	1500	600
11/16" – 1"	750	500	1000	400	1000	350
Spade/Forstner Bits	**Soft Wood**	**Hard Wood**	**Plastic**	**Brass**	**Aluminum**	**Mild Steel**
1/4" – 1/2"	2000	1500				
9/16" – 1"	1500	1250				
1-1/8" – 1-7/8"	1000	750				
2–3"	500	350				
Hole Saws	**Soft Wood**	**Hard Wood**	**Plastic**	**Brass**	**Aluminum**	**Mild Steel**
1/2" – 7/8"	500	500	600	600	600	500
1" – 1-7/8"	400	400	500	500	500	400
2" – 2-7/8"	300	300	400	400	400	300
3" – 3-7/8"	200	200	300	300	300	200
4" – 5"	100	100	200	200	200	100
Rosette Cutters	**Soft Wood**	**Hard Wood**	**Plastic**	**Brass**	**Aluminum**	**Mild Steel**
Carbide Insert Type	350	250				
One-Piece Type	1800	500				
Tenon/Plug Cutters	**Soft Wood**	**Hard Wood**	**Plastic**	**Brass**	**Aluminum**	**Mild Steel**
3/8" – 1/2"	1200	1000				
5/8" – 1"	800	600				

Figure 19. Drill bit speed chart.

Changing Speeds

The belts in the head of the drill press must be rearranged to change speeds. A chart under the belt cover shows the belt positions needed to make the drill press run at the desired speed.

To change speeds:

1. UNPLUG THE DRILL PRESS!

2. Loosen the belt tension lock knobs (**Figure 20**), on both sides of the headstock, so the motor is free to move.

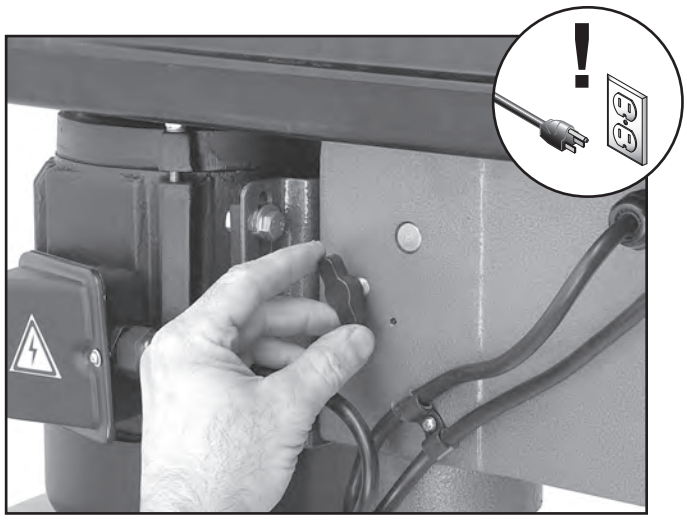


Figure 20. Loosening lock knob (both sides).

3. Rotate the belt tension lever counterclockwise, as shown in **Figure 21**, to take tension off the V-belts.

Figure 21. Using the belt tension lever.

4. Locate the desired speed on the speed chart under the belt cover and move the V-belts to the desired V-grooves on the motor, idler, and spindle pulleys.

   For Example: As indicated in the speed chart (**Figure 22**), a belt combination of **A-2** creates 540 RPM.

   Note: *Both belts may have to be removed before certain speed changes can be made.*

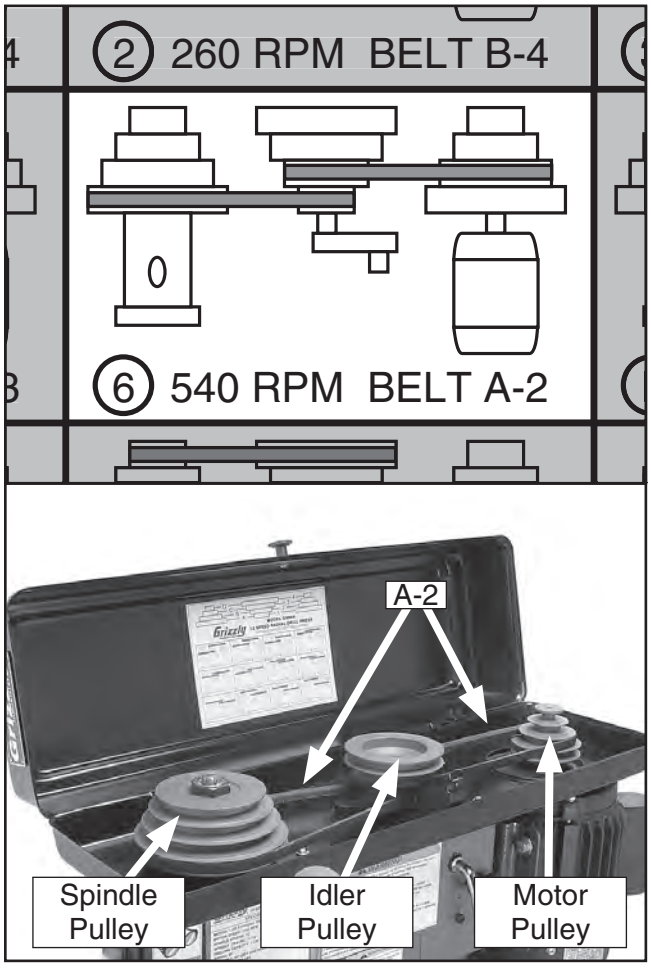


Figure 22. A-2 pulley combination for 540 RPM.

5. Slide the motor back into its original position to place tension on the belts.

6. Tighten the belt tension lock knob.

7. Close the cover before plugging in the machine.

Depth Stop

The Model G9969 has a depth stop that allows you to drill repeated non-through holes to the same depth every time.

The depth stop consists of a stud attached to the quill, with two hex nuts that can be lowered or raised on the stud so the lower nut (depth nut) hits a stop bracket when the drill bit is lowered. The upper hex nut (jam nut) is then used to tighten against the depth nut to secure it in place so the depth nut doesn't move with repeated operations. The depth stop also features a return height hex nut that is used to set the minimum spindle return distance. **Figure 23** shows the various components of the depth stop.

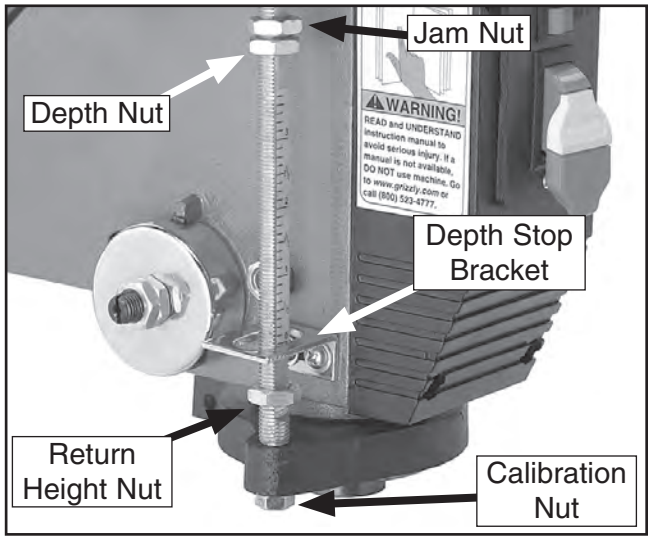


Figure 23. Depth stop components.

To set the depth stop:

1. Lower the drill bit to the required height.
2. Thread the depth nut down against the stop bracket.
3. Lower the jam nut against the depth nut.
4. Hold the depth nut in place and tighten the jam nut against the depth nut.

Note: *The scale on the depth stop can be recalibrated if it gets moved or has changed since the factory setting. Refer to* ***Calibrating Depth Stop*** *on* ***Page 31*** *for instructions on how this is done.*

To set the spindle return distance:

1. Lower the drill bit.
2. Thread the return height nut up the stud to the desired height.

Headstock Adjustment

The headstock can be rotated 360° around the column, can swivel 360° in place, and can tilt 45° to the left or the right. **Figure 24** shows the headstock adjustment components.

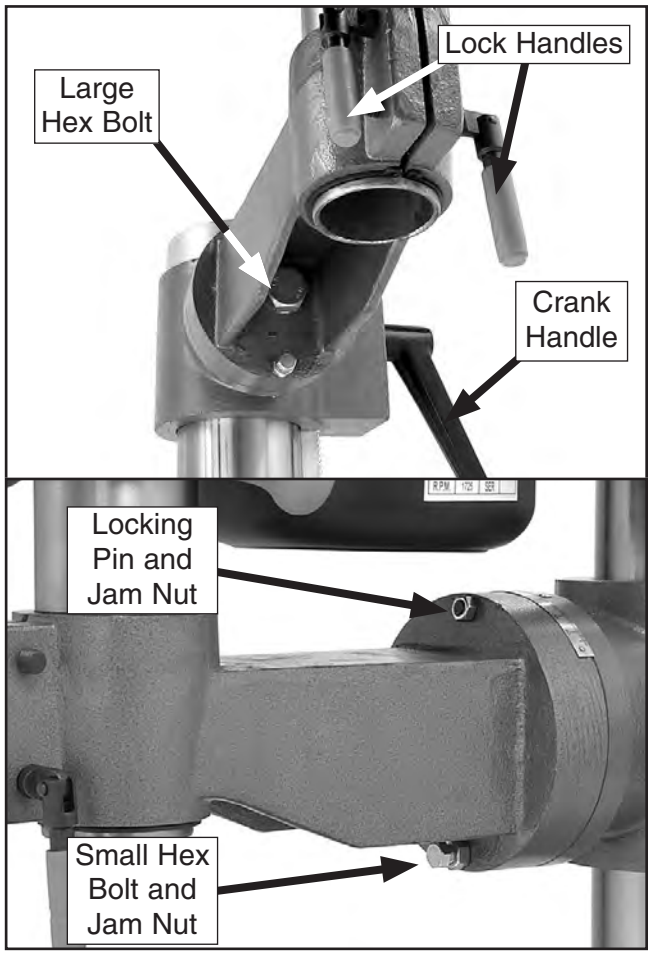


Figure 24. Headstock adjustment components.

Headstock Height & Column Rotation

To tilt the headstock:

1. Slightly loosen the two hex nuts at the rear of the headstock bracket.
2. Adjust the height by turning the crank handle.
3. Adjust the headstock rotation around the column by moving the headstock to the desired position.
4. Tighten the hex nuts.

Headstock Tilt

We recommend that an assistant helps with the headstock tilt process, as the headstock is very heavy.

To tilt the headstock:

1. Loosen the large hex bolt.
2. While an assistant holds the headstock steady, turn the locking pin jam nut clockwise to draw the locking pin out. When the pin has been drawn out far enough, the head should be able to tilt.
3. Tilt the head to the desired angle and tighten the large hex bolt.
4. When returning the headstock to the 0° position, tap the locking pin back into place and tighten the hex nut against the bracket.
5. The small hex bolt and jam nut shown in **Figure 24** are used to control the amount of resistance when tilting. To increase resistance, turn the hex bolt clockwise. To decrease resistance, turn the hex bolt counterclockwise. When resistance adjustments are complete, tighten the jam nut against the bracket.

Headstock Swivel

To swivel the headstock:

1. Loosen the two lock handles at the front of the headstock bracket.
2. Swivel the headstock to the desired point.
3. Tighten the two lock handles.

SECTION 5: ACCESSORIES

G8865—1/16" -1/4" Cobalt Alloy Drill Bits 13-Piece Set
G8866—1/16"-3/8" Steelex® Cobalt Alloy Drill Bits 21-Piece Set
G8867—1/16"-1/2" Steelex® Cobalt Alloy Drill Bits 29-PC Set
Cobalt Alloy bits will retain their edge sharpness longer than normal HSS bits, resulting in a significant saving of time and money in the workshop. Includes a heavy-gauge steel index case.

Figure 25. Model G8865 13-Piece Alloy Drill Bits.

G5753—Drill Press Vise 6"
If you use a drill press and value your fingers, you need one of these. Made from high-grade cast iron, these hefty horizontal vises offer support and stability, allowing you to keep your hands well away from fast moving bits and cutters.

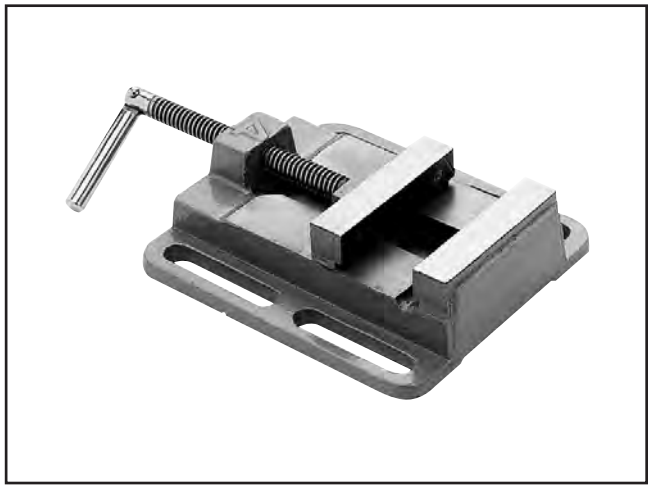


Figure 26. Model G5753 Drill Press Vise 6".

G7984—Face Shield
H1298—Dust Sealed Safety Glasses
H1300—UV Blocking, Clear Safety Glasses
H2347—Uvex® Spitfire Safety Glasses
H0736—Shop Fox® Safety Glasses
Safety Glasses are essential to every shop. If you already have a pair, buy extras for visitors or employees. You can't be too careful when it comes to shop safety!

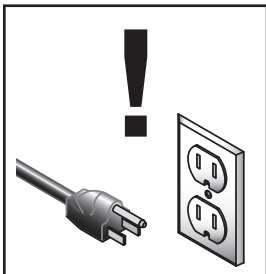
Figure 27. Our most popular safety glasses.

G2500—20-Piece Regular Sanding Drum Set
Use on your drill press, lathe, or hand drill. This kit consists of 5 drums in popular 1/2" x 1/2", 3/4" x 1", 1"x 1", 1 1/2" x 1 1/2", and 2" x 1 1/2" sizes. Comes with 50, 80 and 120 grit sizes for each drum.

Figure 28. Model G2500 Sanding Drum Set.

Call 1-800-523-4777 To Order

SECTION 6: MAINTENANCE



⚠WARNING

Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.

General

Regular periodic maintenance on your drill press will ensure optimum performance. Make a habit of inspecting your machine each time you use it. Check for the following conditions and repair or replace when necessary:

- Loose mounting bolts.
- Worn switch.
- Worn or damaged cords and plugs.
- Worn or damaged V-belts.
- Loose chuck or arbor.
- Any other condition that could hamper the safe operation of this machine.

Cleaning

Cleaning the Model G9969 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Unpainted Cast Iron

Protect the unpainted cast iron surfaces by wiping them clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Keep these surfaces rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9. These are available in the latest Grizzly catalog under the model numbers shown below:

G96® Gun Treatment H3788
SLIPIT® Compound Gel..... G5562
Boeshield® T-9.....H7373

Lubrication

Since all bearings are shielded and permanently lubricated, simply leave them alone until they need to be replaced. DO NOT lubricate them.

Keep quill, spindle, column, and table top well lubricated to prevent rust.

V-Belts

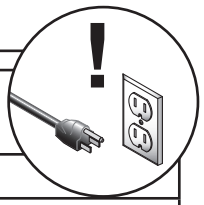
Inspect regularly for tension and wear. Check pulleys to ensure that they are properly aligned. See **Changing Speeds** on **Page 23** for more information about removing/installing belts if you need help replacing the belts.

SECTION 7: SERVICE

About Service

Review the troubleshooting and procedures in this section to fix your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

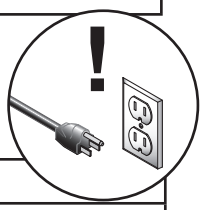
Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	1. Plug or receptacle is at fault or wired incorrectly. 2. Motor connection is wired incorrectly. 3. Power supply is faulty, or is switched ***OFF***. 4. Safety switch key is at fault. 5. ON/OFF switch at fault. 6. Cable or wiring is open or has high resistance. 7. Motor is at fault.	1. Test power plug and receptacle for good contact and correct wiring. 2. Correct motor wiring (see **Page 34**). 3. Make sure all hot lines and grounds are operational and have correct voltage on all legs. 4. Install or replace safety key, or replace switch assembly. 5. Replace faulty switch. 6. Troubleshoot wires for internal or external breaks, check for disconnected or corroded connections and repair or replace wiring, as necessary. 7. Test, repair or replace motor.
Machine stalls or is underpowered.	1. Incorrect spindle speed or feed rate. 2. Machine is undersized for the task. 3. Bit or cutter is too large for machine. 4. Belts are slipping. 5. Plug or receptacle is at fault. 6. Motor connection is wired incorrectly. 7. Pulley is slipping on shaft. 8. Low power supply voltage. 9. Motor bearings are at fault. 10. Motor has overheated. 11. Motor is at fault.	1. Decrease spindle speed or feed rate. 2. Use smaller drill bits/cutters and reduce the feed rate and spindle speed. 3. Use a smaller bit. 4. Replace bad belts, align pulleys, and re-tension. 5. Test power plug and receptacle for good contact and correct wiring. 6. Correct motor wiring (see **Page 34**). 7. Replace loose pulley and shaft. 8. Make sure hot lines and grounds are operational w/correct voltage. 9. Rotate motor shaft for noisy or burnt bearings, repair/replace as required. 10. Clean dust off motor, let it cool, and reduce workload on machine. 11. Test, repair or replace motor.

Symptom	Possible Cause	Possible Solution
Machine vibrates excessively or is unusually noisy.	1. Motor or component is loose. 2. Belt is slapping belt cover. 3. V-belt is worn or is loose. 4. Motor fan is rubbing on fan cover. 5. Pulley is loose. 6. Machine is incorrectly mounted to the workbench, or the workbench is uneven. 7. Chuck or cutter is at fault. 9. Spindle bearings at fault. 8. Motor bearings are at fault.	1. Replace component fasteners and re-tighten with thread locking fluid. 2. Replace, realign, or re-tension belt (refer to **Page 24**). 3. Replace belt. 4. Replace/repair dented fan cover, and replace loose or damaged fan. 5. Remove pulley, replace with key as required, and re-install securely. 6. Make sure the mounting hardware is tight; place shims under machine. 7. Replace out-of-round chuck, replace or resharpen cutter, use appropriate feed rate and cutting RPM. 8. Check bearings, replace motor or bearings as required. 9. Replace bearings.



Drill Press Operations

Symptom	Possible Cause	Possible Solution
Drilling stops, but the motor still operates.	1. The belt is loose or worn. 2. The motor pulley is slipping on the shaft. 3. Bit slips in chuck.	1. Replace or adjust the belt. 2. To resecure the pulley: a. UNPLUG THE DRILL PRESS. b. Remove set screw on slipping pulley. c. Align flats on the pulley shaft with set screw hole. d. Reinstall and tighten the set screw. 3. Tighten bit; inspect bit for burrs or other obstructions that might interfere with clamping surface.
The chuck wobbles or is loose on the spindle shaft.	1. Foreign material is stuck between the chuck-to-spindle mating surface. 2. Damaged chuck.	1. Remove the chuck and clean and de-burr the tapered chuck and spindle mating surfaces, then reassemble. 2. Replace chuck and arbor.
The spindle does not retract completely in the uppermost position or it binds.	1. The quill shaft is gummy with sawdust and oil. 2. The feed shaft return spring is weak. 3. The quill deflection screw is binding the quill. 4. The return height nut is preventing the quill from retracting fully.	1. Clean the gummy substance with penetrating oil and lubricate with a light coat of oil. 2. Increase the feed shaft return spring tension as described on **Page 31**. 3. Loosen jam nut. Slightly turn out screw where the quill binds, retighten jam nut and recheck for binding. 4. Loosen return height nut.
The quill has excessive deflection.	1. The quill shaft is at fault. 2. The quill bearings are worn.	1. Adjust the quill screw. 2. Replace the quill bearings.
Holes drilled at an angle.	1. Headstock is not at 90 degrees.	1. Adjust headstock tilt (see **Page 26**).
Drill bit wobbles, holes are oversized.	1. Drill bit installed incorrectly.	1. Remove drill bit and reinstall.

Depth Stop Calibration

The drill press comes fitted with a depth stop to use when drilling multiple holes at the same depth. The scale on this depth stop can be calibrated if it ever becomes incorrect.

To calibrate the depth stop:

1. Loosen the calibration nut shown in **Figure 29.**

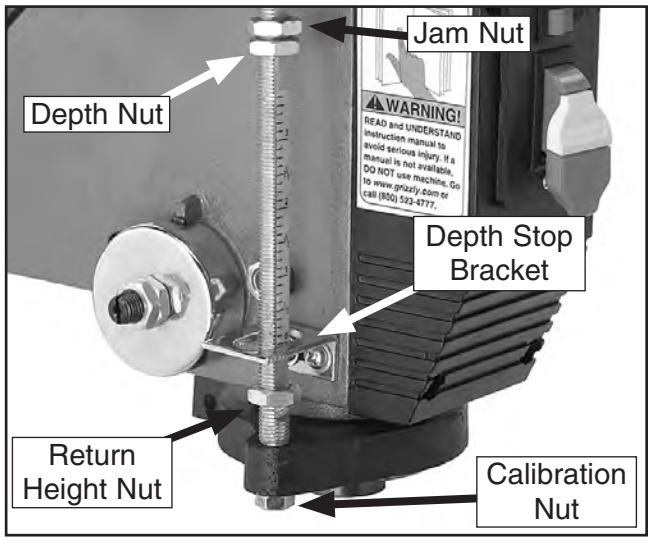


Figure 29. Depth stop assembly.

2. Set the depth nut to zero, and secure it with the jam nut.

3. Tighten the calibration nut to hold the depth stop in position.

4. Move the depth nut and jam nut to a non-zero measurement to allow the spindle to move.

5. Test the depth stop by measuring how far the spindle actually moves with respect to where you set the depth stop**.**

Feed Shaft Spring Tension

The feed shaft return spring is adjusted at the factory; however, during the life of the drill press you may want to adjust the feed shaft return spring so the feed shaft return pressure suits your operating needs.

WARNING

Wear safety glasses when adjusting springs. Serious injury may occur if this warning is ignored!

To adjust the feed shaft spring tension:

1. UNPLUG THE DRILL PRESS!

2. Wipe off any oil on the spring lock cover so it does not slip in your fingers when you hold the cover from spinning (see **Figure 30** for spring lock cover identification).

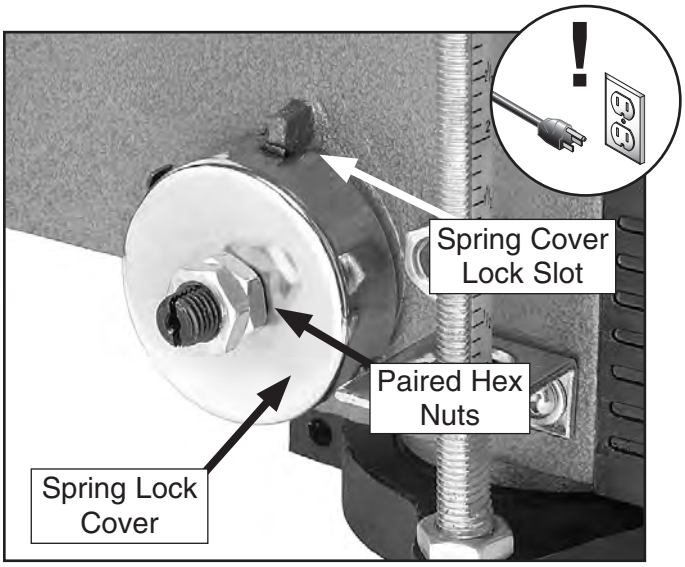


Figure 30. Return spring assembly.

3. Put on heavy leather gloves and safety glasses to protect yourself from possible injury if the spring uncoils during the next step.

Figure 31. Loosening cover and jam nut.

⚠CAUTION

A high tension coiled spring is underneath the cover. Put on heavy leather gloves and safety glasses to protect yourself from possible injury when removing the cover.

4. While holding the spring lock cover against the side of the head stock so the cover stays splined with the locking lug; loosen the jam nut and cover nut approximately $\frac{1}{4}$" (see **Figure 31**).

5. Pull the cover outward just enough to disengage the spring-cover lock slot from the locking lug.

   Note: *It is important to keep a good grip during this step. Letting go of the cover will cause the spring to rapidly uncoil, which could cause serious injury!*

6. Rotate the cover counterclockwise to increase spring tension, or let the cover slowly unwind in the clockwise direction to reduce spring tension.

7. Engage the next available spring-cover lock slot with the locking lug and hold the spring cover tightly against the side of the head stock.

8. Tighten the lock nut against the spring cover just until the nut stops, and then back off the nut approximately $\frac{1}{3}$ turn, or just enough so there is no binding at complete spindle travel.

Electrical Components

Figure 32. G9969 Switch Wiring.

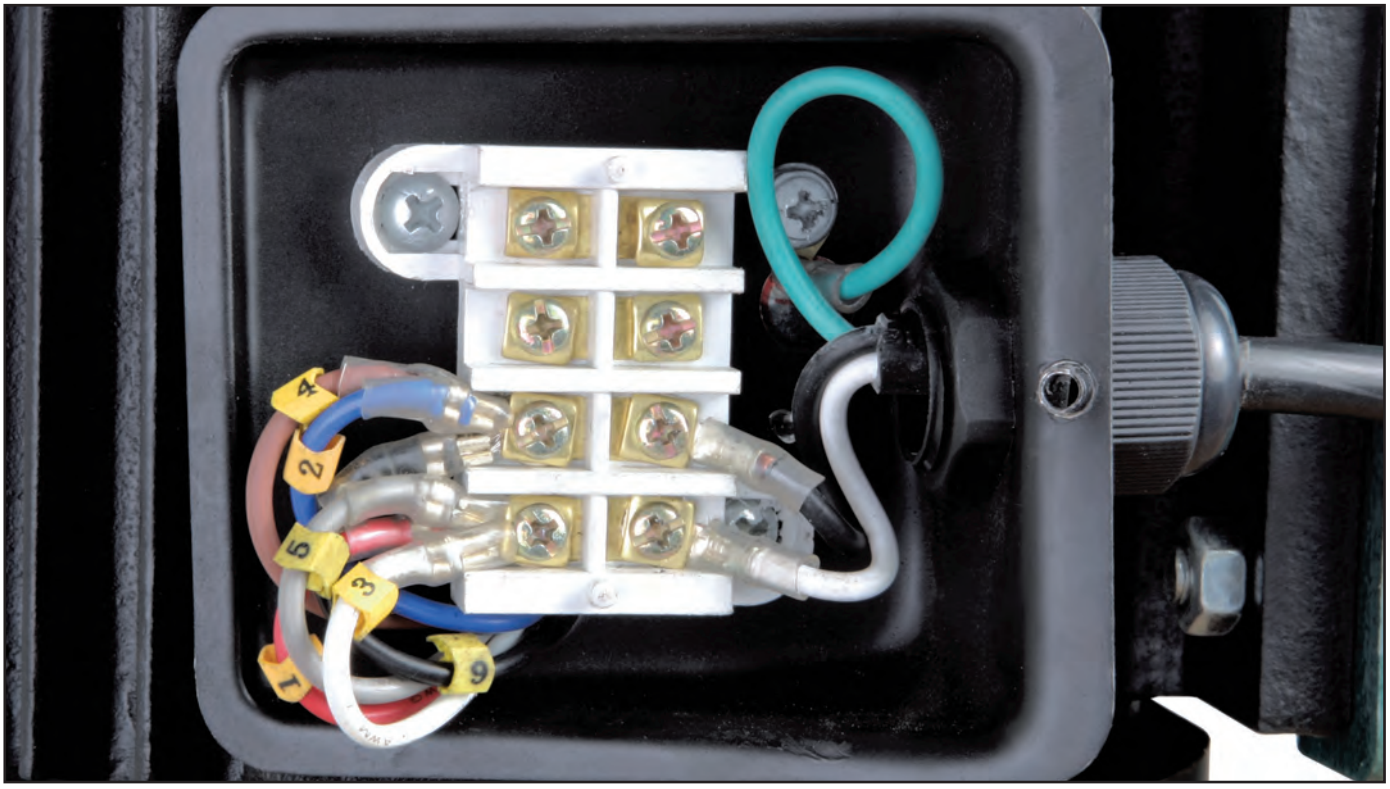
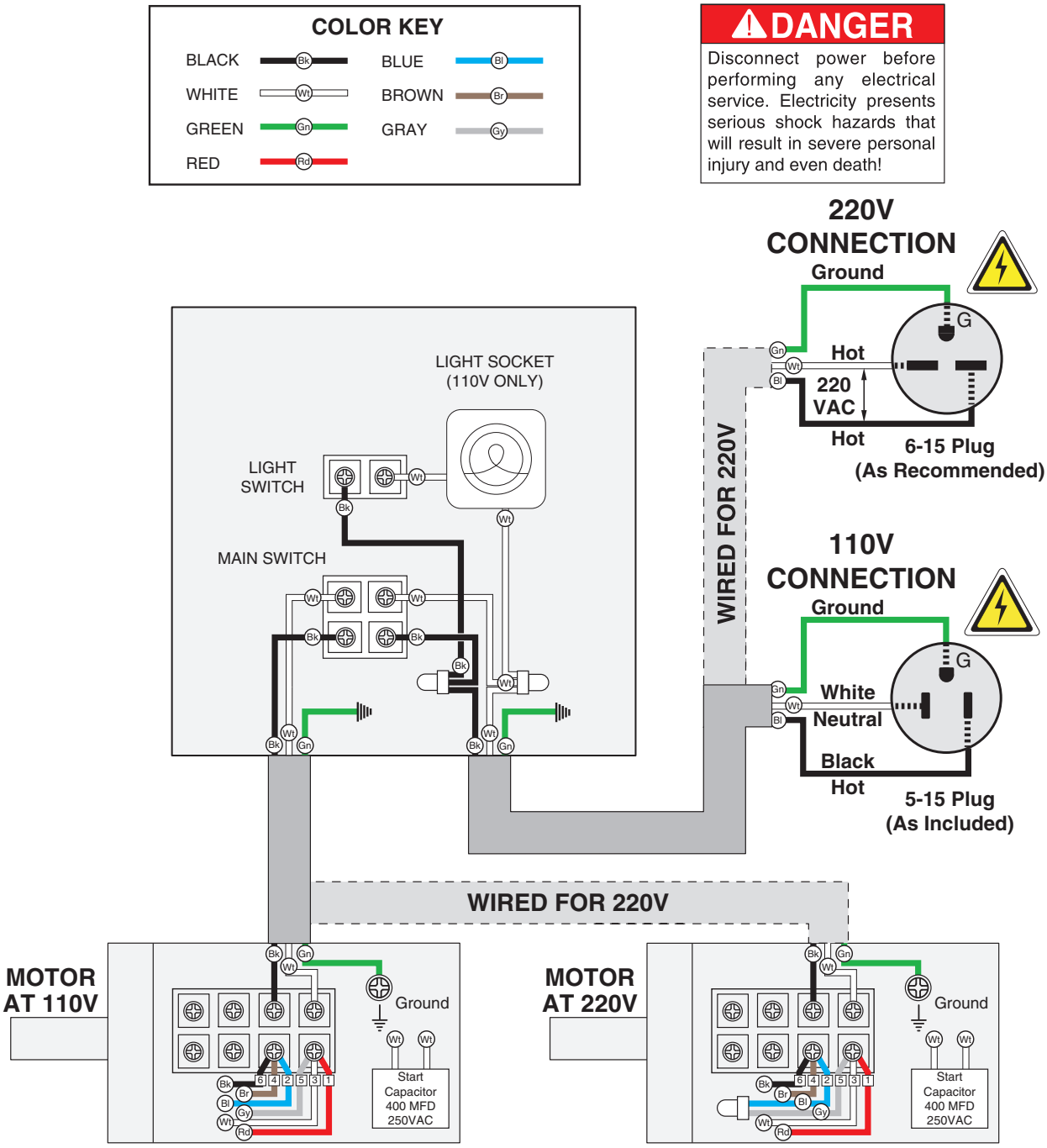


Figure 33. G9969 Junction Box Wiring.

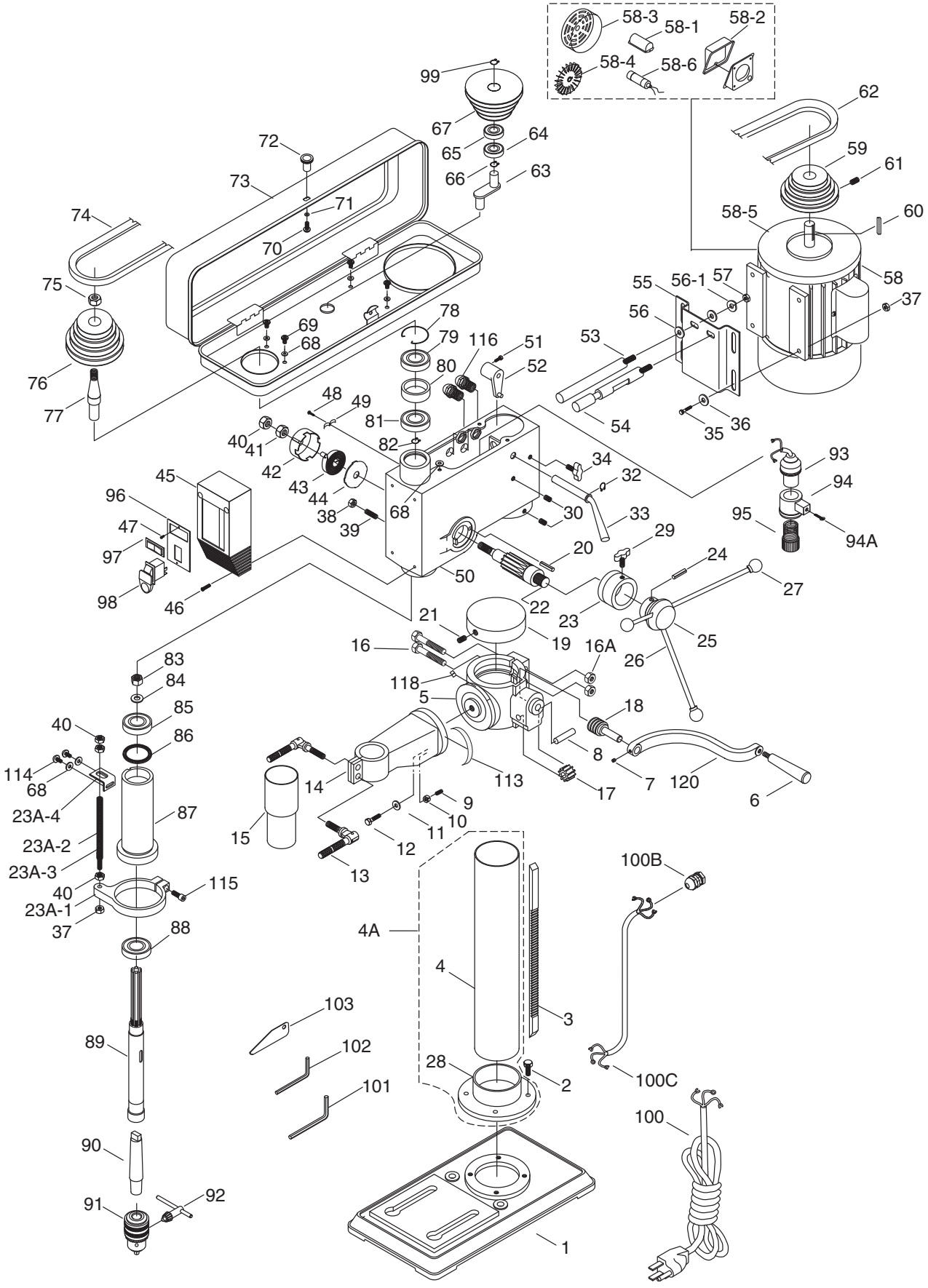
Wiring Diagram

MODEL G9969 RADIAL DRILL PRESS



This wiring diagram can be seen in color on our website at **www.grizzly.com**.

Main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23A-2
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23A-3
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23A-1
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Main Parts List

REF	PART #	DESCRIPTION
1	P9969001	BASE
2	P9969002	HEX BOLT M10-1.5 X 25
3	P9969003	RACK
4	P9969004A	COLUMN
4A	P9969004A	COLUMN ASSEMBLY
5	P9969005	GEARBOX BRACKET
6	P9969006	HANDLE
7	P9969007	SET SCREW M6-1 X 10
8	P9969008	SHAFT
9	P9969009	LOCKING PIN
10	P9969010	HEX NUT M6-1
11	P9969011	FLAT WASHER 24MM
12	P9969012	HEX BOLT M24-30 X 50
13	P9969013	LOCK HANDLE
14	P9969014	TABLE SUPPORT ASSEMBLY
15	P9969015	BRACKET COLUMN
16	P9969016	CLAMP BOLT M16-1.75 X 60
16A	P9969016A	HEX NUT M16-2
17	P9969017	PINION GEAR
18	P9969018	WORM GEAR
19	P9969019	COLUMN CAP
20	P9969020	ROLL PIN 6 X 20
21	P9969021	SET SCREW M6-1 X 10
22	P9969022	FEED SHAFT
23	P9969023	DEPTH RING
23A-1	P9969023A-1	DEPTH STOP BRACKET V1
23A-2	P9969023A-2	SCALE
23A-3	P9969023A-3	DEPTH STOP SCALE STUD
23A-4	P9969023A-4	DEPTH STOP BRACKET
24	P9969024	ROLL PIN 5 X 40
25	P9969025	PINION HUB
26	P9969026	DOWNFEED HANDLE
27	P9969027	DOWNFEED HANDLE KNOB
28	P9969028	COLUMN SHOULDER
29	P9969029	DEPTH RING KNOB M8-1.25 X 16
30	P9969030	SET SCREW M10-1.5 X 12
32	P9969032	EXT RETAINING RING 15MM
33	P9969033	TENSION LEVER
34	P9969034	BELT TENSION KNOB M8-1.25 X 16
35	P9969035	HEX BOLT M8-1.25 X 24
36	P9969036	FLAT WASHER 8MM
37	P9969037	HEX NUT M8-1.25
38	P9969038	HEX NUT M10-1.5
39	P9969039	BODY SET SCREW M10-1.5 X 25
40	P9969040	HEX NUT M12-1.75 THIN
41	P9969041	HEX NUT M12-1.75 THIN
42	P9969042	SPRING CAP
43	P9969043	FLAT COIL SPRING
44	P9969044	SPRING COVER
45	P9969045	SWITCH BOX
46	P9969046	PHLP HD SCR M5-.8 X 12
47	P9969047	TAP SCREW #6 X 1/2
48	P9969048	PHLP HD SCR M5-.8 X 10

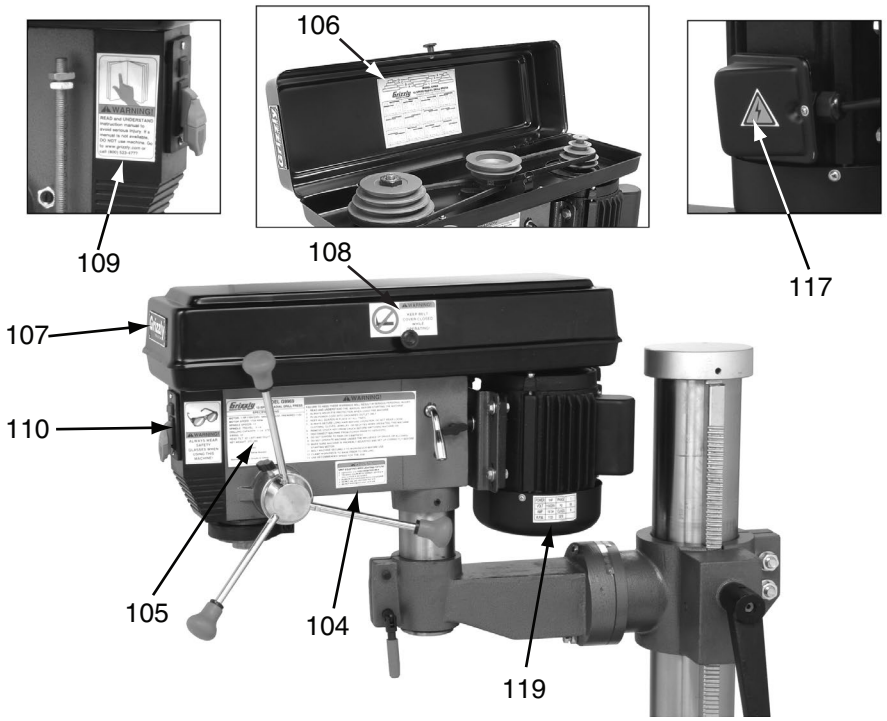
REF	PART #	DESCRIPTION
49	P9969049	CORD CLAMP
50	P9969050	BODY
51	P9969051	HEX BOLT M8-1.25 X 16
52	P9969052	SHIFTER
53	P9969053	SLIDE BAR
54	P9969054	NOTCHED SLIDE BAR
55	P9969055	MOTOR BASE
56	P9969056	FLAT WASHER 12MM
56-1	P9969056-1	LOCK WASHER 12MM
57	P9969057	HEX NUT M12-1.75
58	P9969058	MOTOR 1HP 110V/220V 1PH
58-1	P9969058-1	CAPACITOR COVER
58-2	P9969058-2	CONNECTION BOX
58-3	P9969058-3	MOTOR COVER
58-4	P9969058-4	MOTOR FAN
58-5	P9969058-5	CAST IRON END BELL FOR MOTOR
58-6	P9969058-6	S CAPACITOR 200M 125V
59	P9969059	MOTOR PULLEY V2.02.99
60	P9969060	KEY 5 X 5 X 20
61	P9969061	SET SCREW M6-1 X 10
62	P9969062	V-BELT M27.5 3L275
63	P9969063	CENTER SHAFT
64	P9969064	BALL BEARING 6202ZZ
65	P9969065	BALL BEARING 6202ZZ
66	P9969066	EXT RETAINING RING 15MM
67	P9969067	CENTER PULLEY
68	P9969068	FLAT WASHER 6MM
69	P9969069	PHLP HD SCR M6-1 X 10
70	P9969070	PHLP HD SCR M5-.8 X 8
71	P9969071	FLAT WASHER 5MM
72	P9969072	KNOB M5-.8
73	P9969073	PULLEY COVER
74	P9969074	V-BELT M27.5 3L275
75	P9969075	PULLEY NUT
76	P9969076	SPINDLE PULLEY V2.02.99
77	P9969077	SPINDLE PULLEY SHAFT
78	P9969078	INT RETAINING RING 62MM
79	P9969079	BALL BEARING 6205ZZ
80	P9969080	SPACER
81	P9969081	BALL BEARING 6205ZZ
82	P9969082	INT RETAINING RING 62MM
83	P9969083	ROUND NUT M17 X 1
84	P9969084	THRUST WASHER 17.5MM
85	P9969085	BALL BEARING 6203ZZ
86	P9969086	RUBBER WASHER 62 X 50 X 2
87	P9969087	QUILL
88	P9969088	BALL BEARING 6205ZZ
89	P9969089	SPINDLE
90	P9969090	ARBOR MT#3-JT#3
91	P9969091	CHUCK 1-16MM JT3
92	P9969092	CHUCK KEY
93	P9969093	LIGHT SOCKET 110V

Main Parts List Continued

REF	PART #	DESCRIPTION
94	P9969094	LIGHT BASE 110V
94A	P9969094A	PHLP HD SCR M5-.8 X 20
95	P9969095	LIGHT SCREW
96	P9969096	SWITCH PLATE
97	P9969097	LIGHT SWITCH
98	P9969098	SAFETY PADDLE SWITCH
99	P9969099	INT RETAINING RING 38MM
100	P9969100	POWER CORD
100B	P9969100B	STRAIN RELIEF
100C	P9969100C	MOTOR CORD

REF	PART #	DESCRIPTION
101	P9969101	HEX WRENCH 5MM
102	P9969102	HEX WRENCH 3MM
103	P9969103	DRIFT KEY
113	P9969113	ANGLE SCALE
114	P9969114	PHLP HD SCR M6-1 X 8
115	P9969115	CAP SCREW M8-1.25 X 20
116	P9969116	STRAIN RELIEF
118	P9969118	INDICATOR
120	P9969120	CRANK LEVER

Labels



REF	PART #	DESCRIPTION
104	P9969104	LIGHT WARNING LABEL
105	P9969105	WARNING/ID LABEL
106	P9969106	SPEED CHART LABEL
107	P9969107	GRIZZLY BLACK/AL LABEL
108	P9969108	BELT COVER CLOSED LABEL

REF	PART #	DESCRIPTION
109	P9969109	READ MANUAL 2" X 3-5/16"
110	P9969110	SAFETY GLASSES 2" X 3-5/16"
117	P9969117	ELECTRICITY LABEL
119	P9969119	MOTOR LABEL

⚠WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine MUST maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, REPLACE that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.

WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number,'' which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

Grizzly Industrial, Inc. WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. ***Of course, all information is strictly confidential.***

1. How did you learn about us?

____ Advertisement ____ Friend ____ Catalog
____ Card Deck ____ Website ____ Other:

2. Which of the following magazines do you subscribe to?

____ Cabinet Maker
____ Family Handyman
____ Hand Loader
____ Handy
____ Home Shop Machinist
____ Journal of Light Cont.
____ Live Steam
____ Model Airplane News
____ Modeltec
____ Old House Journal
____ Popular Mechanics
____ Popular Science
____ Popular Woodworking
____ Practical Homeowner
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

3. What is your annual household income?

____ $20,000-$29,000 ____ $30,000-$39,000 ____ $40,000-$49,000
____ $50,000-$59,000 ____ $60,000-$69,000 ____ $70,000+

4. What is your age group?

____ 20-29 ____ 30-39 ____ 40-49
____ 50-59 ____ 60-69 ____ 70+

5. How long have you been a woodworker/metalworker?

____ 0-2 Years ____ 2-8 Years ____ 8-20 Years ____ 20+ Years

6. How many of your machines or tools are Grizzly?

____ 0-2 ____ 3-5 ____ 6-9 ____ 10+

7. Do you think your machine represents a good value? _____ Yes _____ No

8. Would you recommend Grizzly Industrial to a friend? _____ Yes _____ No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: *We never use names more than 3 times.* _____ Yes _____ No

10. Comments: _____

_____

_____

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